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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,872	02/28/2007	Cliff Aaby	287846US28PCT	8680
88095	7590	03/03/2010		
ARRIS 3871 Lakefield Drive Suwanee, GA 30024			EXAMINER CHOKSHI, PINKAL R	
			ART UNIT 2425	PAPER NUMBER
			NOTIFICATION DATE 03/03/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mirho@fspllc.com

Office Action Summary	Application No. 10/578,872	Applicant(s) AABY ET AL.	
	Examiner Pinkal R. Chokshi	Art Unit 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/30/2009 with respect to claims 3-5 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments regarding claim 1 have been fully considered but they are not persuasive.

Regarding claim 1, Applicant asserts that the Dunn does not teach that the server inserts markers comprising position information in to the stream. Examiner respectfully disagrees. Dunn discloses (col.6, lines 26-27, 39-55) that the STB receives A/V stream and transmits a pointer that indicates a pause point of the VOD program, to the head-end. However, Dunn does not disclose that the pointer, received from the STB, is inserted into the stream transmitted to the STB and comprises position information. For this limitation, Kwoh discloses (col.13, lines 19-22; col.17, lines 32-45) that the A/V stream, delivered to the STB, includes rating data (pointers) inserted in the VBI signal that marks the beginning and the ending (position data) of the video segment in the A/V stream. Kwoh further discloses (col.17, lines 46-51) that based on the rating data, system blocks/unblocks (pause/resume) the specific video segments. Therefore, it would have been obvious to one of the ordinary skills in the art to replace the pointer used for the pause point in the Dunn with the pointers inserted in the stream of the Kwoh to provide accurate place of pause/resume points in a program.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections

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are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

See the new rejection below.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3 are stand rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Normally, a system claim would be statutory. However, the specification, at paragraph (0019) indicates that the logics refer to software. Since, the claimed logics maybe software, then the system as whole can be considered to be only software which is not a "process", "machine", or "article of manufacture".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. **Claims 3-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7,055,166 to Logan et al (hereafter referenced as Logan) in view of US PG Pub 2005/0044568 to White et al (hereafter referenced as White).

Regarding **claim 3**, “a content on demand system” reads on the storage that takes place at the server system that distributes content on demand to a receiver units (col.8, lines 4-18) disclosed by Logan and represented in Fig. 1.

As to “system comprising: logic to deliver at least one audio and/or video stream and to insert one or more of position, rating, restrictions, or commercial markers” Logan discloses (col.2, lines 56-59; col.8, lines 18-26; col.13, lines 11-30) that the receiver receives marking signal embedded in the broadcast programming signal, where marking signal instructs receiver about the particular portion, such as commercials or pause/FF in VOD program, of the broadcasting programming signal.

Logan meets all the limitations of the claim except “logic to terminate rendering of the audio and/or video stream when an insufficient number of the markers are detected within a time interval.” However, White discloses (¶0045, ¶0046) that when user pauses/changes channel during the VOD program, a code (marker) indicating the point of video interruption is stored at the head-end. White further discloses (¶0050) that the system waits for predetermined time period (24 hours) to receive a marker to resume the VOD program and when it does not detect a marker (no user action to resume the VOD program), video transmission is terminated (no video control panel is presented). Therefore, it

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would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan's system by using marker to determine the termination or continuation of rendering of the A/V program as taught by White in order to continue viewing the video from the place it was interrupted or the provider can charge for the VOD content when it exceeds the time limit (§0010).

Regarding **claim 4**, "a set top box" reads on the receiver unit (col.8, lines 4-5) disclosed by Logan and represented in Fig. 1.

As to "STB comprising: logic to scan an audio and/or video stream for one or more of position, rating, restrictions, or commercial markers" Logan discloses (col.11, lines 29-36) that the processor in the receiver scans computer-readable data/programming data to search and generate marking signals. Logan further discloses (col.2, lines 56-59; col.8, lines 18-26; col.13, lines 11-30) that the receiver receives marking signal embedded in the broadcast programming signal, where marking signal instructs receiver about the particular portion, such as commercials or pause/FF in VOD program, of the broadcasting programming signal.

Logan meets all the limitations of the claim except "logic to terminate rendering of the audio and/or video stream when an insufficient number of the markers are detected within a time interval." However, White discloses (§0045, §0046) that when user pauses/changes channel during the VOD program, a code (marker) indicating the point of video interruption is stored at the head-end.

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White further discloses (§0050) that the system waits for predetermined time period (24 hours) to receive a marker to resume the VOD program and when it does not detect a marker (no user action to resume the VOD program), video transmission is terminated (no video control panel is presented). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan's system by using marker to determine the termination or continuation of rendering of the A/V program as taught by White in order to continue viewing the video from the place it was interrupted or the provider can charge for the VOD content when it exceeds the time limit (§0010).

Regarding **claim 5**, "the set top box wherein at least one marker indicates proximity of an end of the audio and/or video stream" Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning and ending of commercials.

Regarding **claim 6**, "the set top box wherein at least one marker indicates proximity of an advertisement in the audio and/or video stream" Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning of the commercials.

Regarding **claim 7**, "the set top box wherein at least one marker indicates a rating of content of the audio and/or video stream" Logan discloses (col.3, lines

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4-17) that the apparatus receives marking signal that indicates the rating of the program segment.

Regarding **claim 8**, “the set top box further comprising logic to inhibit at least one of fast forward, rewind, pausing, skipping, or playing of the audio and/or video stream” Logan discloses (col.13, lines 11-30) that the marking signal includes a blocking signal (restricting condition) that prevents user from skipping predefined segment/commercial (subsection of the stream) of the broadcast programming signal.

5. **Claims 1 and 2** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,721,829 to Dunn et al (hereafter referenced as Dunn) in view of US Patent 6,115,057 to Kwoh et al (hereafter referenced as Kwoh).

Regarding **claim 1**, “a content on demand system” reads on the user interface unit that is operable in a VOD mode to order and receive video content programs from head-end (abstract) disclosed by Dunn and represented in Fig. 1.

As to “system comprising: logic to receive from a set top box a marker obtained from the stream and comprising position data for an audio and/or video stream for which the set top box has paused or suspended viewing” Dunn discloses (col.6, lines 26-27, 39-55) that the STB transmits a pause message, such as a pointer, to identify the pause point of the VOD program in the memory location that matches to the juncture of the program when paused to the head-end.

As to “upon a signal from the set top box to resume streaming of the audio and/or video stream from a position proximate to the position data indicated by the marker” Dunn further discloses (col.2, lines 8-18; col.7, lines 9-19) that when viewer changes from the VOD to a regular channel, head-end automatically pauses transmission of VOD program, and resume transmission of VOD program based on the program ID and pause point (pointer) stored the database.

As to “server logic to deliver at least one audio and/or video stream and to insert markers in the at least one stream, the markers comprising position data in the at least one stream” Dunn discloses (col.2, lines 4-18 and abstract) that the STB receives video content programs from head-end. However, Dunn does not explicitly teach that the server inserts markers in the stream and markers comprising position data in the stream. Kwoh discloses (col.13, lines 19-22; col.17, lines 32-45) that the television system delivers video stream and insert a rating data (markers) at the beginning (position data) to mark the beginning of a rated video segment and at the end of a video segment (position data) to mark the end of the video segment or embed the rating data in the VBI to mark the video segment for control viewing of the rated video segment as represented in Figs. 23, 24, and 26. Therefore, it would have been obvious to one of the ordinary skills in the art at the time on the invention to modify Dunn's system by using a stream with markers already presented in the stream as taught by Kwoh in order to provide accurate place of start/end point of a program.

Regarding **claim 2**, “the content on demand system further comprising: logic to deliver at least one audio and/or video stream and to insert markers in the at least one stream, the markers indicating a rating of content of the stream proximate to a position of the marker” Kwoh discloses (col.17, lines 32-45) that the television system delivers video stream and insert a rating data at the beginning to mark the beginning of a rated video segment and at the end of a video segment to mark the end of the video segment or embed the rating data in the VBI to mark the video segment for control viewing of the rated video segment as represented in Figs. 23, 24, and 26. Therefore, it would have been obvious to one of the ordinary skills in the art at the time on the invention to modify Dunn's system by using a stream with markers already presented in the stream as taught by Kwoh in order to provide accurate place of start/end point of a program.

6. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of White as applied to claim 4 above, and further in view of Kwoh.

Regarding **claim 9**, combination of Logan and White meets all the limitations of the claim except “the set top box further comprising logic to inhibit at least one of viewing or listening of the audio and/or video stream when the rating is mature content.” However, Kwoh discloses (col.16, lines 54-61) that when R rating start data is detected, the receiver blocks the R rated video segment for the television screen. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan and White's

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systems by blocking R/Mature rated content from viewing as taught by Kwoh in order to provide parental control which prevents the children from viewing the unsuitable content (col.1, lines 54-56).

7. **Claims 11-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of White as applied to claim 4 above, and further in view of US PG Pub 2003/0188316 to DePrez (hereafter referenced as DePrez).

Regarding **claim 11**, combination of Logan and White meets all the limitations of the claim except “the set top box further comprising: logic to enable rendering and/or navigation of the audio and/or video stream when a marker indicating an end to a restricting condition is encountered in the audio and/or video stream.” However, DePrez discloses (§0203) that the process for verifying authorized playback of a program where a timer used to prevent excessive viewing while waiting for a response on authorization. If timer expires while waiting for continued viewing to be authorized, then it causes viewing of the program to stop. DePrez further discloses (§0204) that the user is directed to watch the original program after authorized program timer’s stop. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan and White’s systems by starting to deliver a/v stream when marker is detected as taught by DePrez so the viewing of regular programming can be continued.

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Regarding **claim 12**, “the set top box wherein the restricting condition further comprises: proximity of an end of the audio and/or video stream” Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning and ending of commercials.

Regarding **claim 13**, “the set top box wherein the restricting condition further comprises: proximity of an advertisement in the audio and/or video stream” Logan discloses (col.21, lines 1-8; col.3, lines 4-17) that the marking signal indicates information that includes time stamps that defines the beginning of the commercials.

Regarding **claim 14**, “the set top box wherein the restricting condition further comprises: a rating of content of the audio and/or video stream” Logan discloses (col.3, lines 4-17) that the apparatus receives marking signal that indicates the rating of the program segment.

Regarding **claim 15**, “the set top box wherein the logic to enable rendering and/or navigation of the audio and/or video stream further comprises: the logic to enable at least one of fast forward, rewind, pausing, skipping, or playing of the audio and/or video stream” Logan discloses (col.13, lines 11-30) that the marking signal includes a blocking signal (restricting condition) that prevents user from

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skipping predefined segment/commercial (subsection of the stream) of the broadcast programming signal.

8. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of White and DePrez as applied to claim 11-15 above, and further in view of Kwoh.

Regarding **claim 16**, combination of Logan, White and DePrez meets all the limitations of the claim except “the set top box wherein the logic to enable rendering and/or navigation of the audio and/or video stream further comprises: the logic to enable at least one of viewing or listening of the audio and/or video stream when the rating is no longer mature content.” However, Kwoh discloses (col.16, lines 54-61) that when R rating start data is detected, the receiver blocks the R rated video segment for the television screen. When R rating end data is detected, the display of G rated video continues. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Logan, White and DePrez's systems by blocking R/Mature rated content from viewing as taught by Kwoh in order to provide parental control which prevents the children from viewing the unsuitable content (col.1, lines 54-56).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 7,614,066 to Urdang
- US PG Pub 2004/0261128 to Fahy

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pinkal R. Chokshi whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Monday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Pinkal R. Chokshi/
Examiner, Art Unit 2425

/Brian T. Pendleton/
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